Lot 8—Fields 1, 3

FIELD WORKSHEET #1
GENERAL FORESTRY INFORMATION

Lot # 8 **Total Acres:** 71 **Field Number(s):** 1, 3 **Acres:** 51 **Date:** 9/9/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable	Condition (Good, Fair, Poor)
Norway Spruce	12-21	Heavy	12	Even	70	76	Good
Black Cherry	12-20	Light	9	Multiple		82 42	Good

* "S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions
** Represents the most recent growth rings per inch from a core sample

Comments
These fields represent mature Norway Spruce (Picea abies) Plantations with light hardwood intrusions of mature Black Cherry (Prunus serotina).

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems
None

Fire Lane Status
The east - west Fire Break in this field is approximately 8-10 feet wide, in need of general widening and is well used by All Terrain Vehicles. This use is strictly prohibited on County Forest property and violators will be prosecuted. The north - south Fire Break is approximately 8-10 feet wide and is in need of clearing and widening. The Fire Break along Morse Road is approximately 15 feet wide and is in need of significant clearing and pruning.

Note
There seems to be a discrepancy in Lot Number 8 regarding Field #4. The ECSWCD map of 2003 and the field work indicate that this 4 acre parcel does not exist as is indicated by the 1965 Management report. We therefore are excluding it from Lot Number 8.

Lot 8—Fields 1, 3

FIELD WORKSHEET #2
ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy
The canopy is of heavy density and is characterized by Norway Spruce (Picea abies) along with light hardwood intrusions of Black Cherry (Prunus serotina).

Subcanopy
The subcanopy is not present.

Shrub Layer
The shrub layer is not present.

Herbaceous Layer
The herbaceous layer is not present.

Successional Status

These fields represent mature Norway Spruce (Picea abies) Plantations in the mid – late stages of hardwood succession with light intrusions of mature Black Cherry (Prunus serotina) present in the canopy.

Botanical Concerns - includes both invasive and protected species

Invasive: None
Protected: None

Lot 8—Field 2

FIELD WORKSHEET #1
GENERAL FORESTRY INFORMATION

Lot # 8 **Total Acres:** 71 **Field Number(s):** 2 **Acres:** 20 **Date:** 9/9/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable		Condition (Good, Fair, Poor)
Eastern Hemlock	12-32	Medium - Heavy	16	Multiple		82		Good
Sugar Maple	12-26	Medium - Heavy	11	Multiple		74	30	Fair
American Beech	12-28	Light	18	Multiple		77	29	Fair

* "S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions
** Represents the most recent growth rings per inch from a core sample

Comments
This field represents a mature Hardwood Forest dominated by Sugar Maple (Acer saccharum), American Beech (Fagus grandifolia) and Eastern Hemlock (Tsuga canadensis), a conifer associate. This field also contains a variety of mature mixed hardwoods such as Red Maple (Acer rubrum), White Ash (Fraxinus americana) and Basswood (Tilia americana). The terrain in this field is generally steep and serves as a drainage basin for Field Numbers 1 and 3. Note: A Red Maple (Acer rubrum) was measured at a D.B.H. of 53 inches.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems
This field contains a westerly flowing four season stream.

Fire Lane Status
None

Lot 8—Field 2

FIELD WORKSHEET #2
ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of medium - heavy density and is characterized by Sugar Maple (Acer saccharum), American Beech (Fagus grandifolia) and Eastern Hemlock (Tsuga canadensis), a conifer associate.

Subcanopy

The subcanopy is of light density and is represented primarily by Sugar Maple (Acer saccharum).

Shrub Layer

The shrub layer is not present.

Herbaceous Layer

The herbaceous layer is light, concentrated along the stream banks and includes a variety of ferns such as New York fern (Thelypteris noveboracensis), Christmas fern (Polystichum acrostichoides), Evergreen Woodfern (Dryopteris intermedia) and Hayscented fern (Dennstaedtia punctilobula) along with Wild Sarsaparilla (Aralia nudicaulis), White Baneberry (Actaea pachypoda), Turtlehead (Chelone glabra) and Tree Clubmoss (Lycopodium obscurum).

Successional Status

This field represents a mature Maple/Beech Hardwood Forest. These species will continue to dominate as they further evolve into a characteristic Climax Forest.

Botanical Concerns - includes both invasive and protected species

Invasive: None

Protected: All ferns listed under "Herbaceous Layer" except Hayscented fern (Dennstaedtia punctilobula). White Baneberry (Actaea pachypoda), Turtlehead (Chelone glabra) and Tree Clubmoss (Lycopodium obscurum) are also protected.

Lot 8 Summary and Recommendations

FIELD WORKSHEET #3
WILDLIFE SUMMARY

Lot # 8 offers a good variety of habitats for diverse populations of wildlife. Field Numbers 1 and 3 represent mature Conifer Plantations with light harwood intrusions, while Field Number 2 represents a mature Maple/Beech Hardwood Forest.

During a period of approximately one day, staff ecologists recorded a variety of wildlife observations focused upon actual sightings and other wildlife "signs". The following list represents a brief overview of those encounters focused upon Mammals, Birds and Reptiles/Amphibians.

Mammals

Whitetail Deer (Odocoileus virginianus)
Eastern Chipmunk (Tamias striatus)
Raccoon (Procyon lotor)
Red Squirrel (Tamiasciurus hudsonicus)
Gray Squirrel (Sciurus carolinensis)
Coyote (Canis latrans)

Birds

Wild Turkey (Meleagris gallopavo)
Pileated Woodpecker (Dryocopus pileatus)
White-breasted Nuthatch (Sitta carolinensis)
American Goldfinch (Carduelis tristis)
Common Crow (Corvus brachyrhynchos)
Black-capped Chickadee (Parus atricapillus)
Blue Jay (Cyanocitta cristata)
Great Crested Flycatcher (Myiarchus crinitus)
Hairy Woodpecker (Picoides villosus)

Reptiles/Amphibians

American Toad (Bufo americanus)
Wood Frog (Rana sylvatica)
Spring Peeper (Hyla crucifer)

FIELD WORKSHEET #4
RECOMMENDATIONS

The following recommendations for Lot # 8 of the Erie County Forestry Management Plan are based upon field data collected by Earth Spirit Educational Services, Inc. in the areas of Forest Ecology, Wildlife Biology and general Ecology.

Field Numbers 1 and 3

Description - These fields represent mature Conifer Plantations of Norway Spruce (Picea abies) with hardwood intrusions of Black Cherry (Prunus serotina).
Recommendations – These fields of mature Norway Spruce should be actively managed, however a buffer zone of at least 100 feet should be considered along both ridges in order to prevent erosion and protect the watershed. The Black Cherry in these fields should remain without treatment in order to serve as "seed trees" for hardwood regeneration.

Field Number 2

Description – This field represents a mature, mixed Hardwood Forest dominated by Sugar Maple (Acer saccharum), American Beech (Fagus grandifolia) and Eastern Hemlock (Tsuga canadensis), a conifer associate. This field is generally inaccessible due to the steepness of the terrain and its proximity to the stream.
Recommendations – This field should remain without treatment in order to prevent erosion, protect the watershed and enhance wildlife habitat.

Lot 8
Soils, Waterways and Topography

Soils

The uplands on Lot 8 are primarily the moderately well drained Langford Channery Silt Loam (LfB and LfC), with 3-15% slopes, and the somewhat poorly drained Erie Channery Silt Loam (ErB), with 3-8% slopes. These soils have moderate permeability and are potentially highly erodible, and highly erodible on the steeper slopes. Toward the western portion of the lot, the upland soils are the moderately well drained Mardin Silt Loam (McC), with 8-15% slopes. These soils are highly erodible and have moderate permeability. The lot is underlain by a fragipan at a depth of 15 to 50 inches, and permeability is slow below the fragipan. Along the drainage gully the soils are of the well drained Mardin-Valois Complex (MeF), with 25-50% slopes, a highly erodible soil with moderate to slow permeability. A perennial cover should be maintained on this lot to minimize soil erosion.

Waterways and Topography

An east-west drainage channel bisects Lot 8, with steep, highly erodible side slopes. The drainage is identified as stream Class A, and is a tributary of Eighteenmile Creek, also a Class A stream, protected as a drinking water source. The primary pollutant threatening fish propagation and survival in Eighteenmile Creek is sediment from streambank erosion. A forested buffer should be maintained along all waterways in the watershed to minimize soil disturbance. Secondary pollutants include pesticides, nutrients, salts, thermal changes and pathogens, from agriculture, construction, urban runoff, resource extraction and on-site waste treatment.

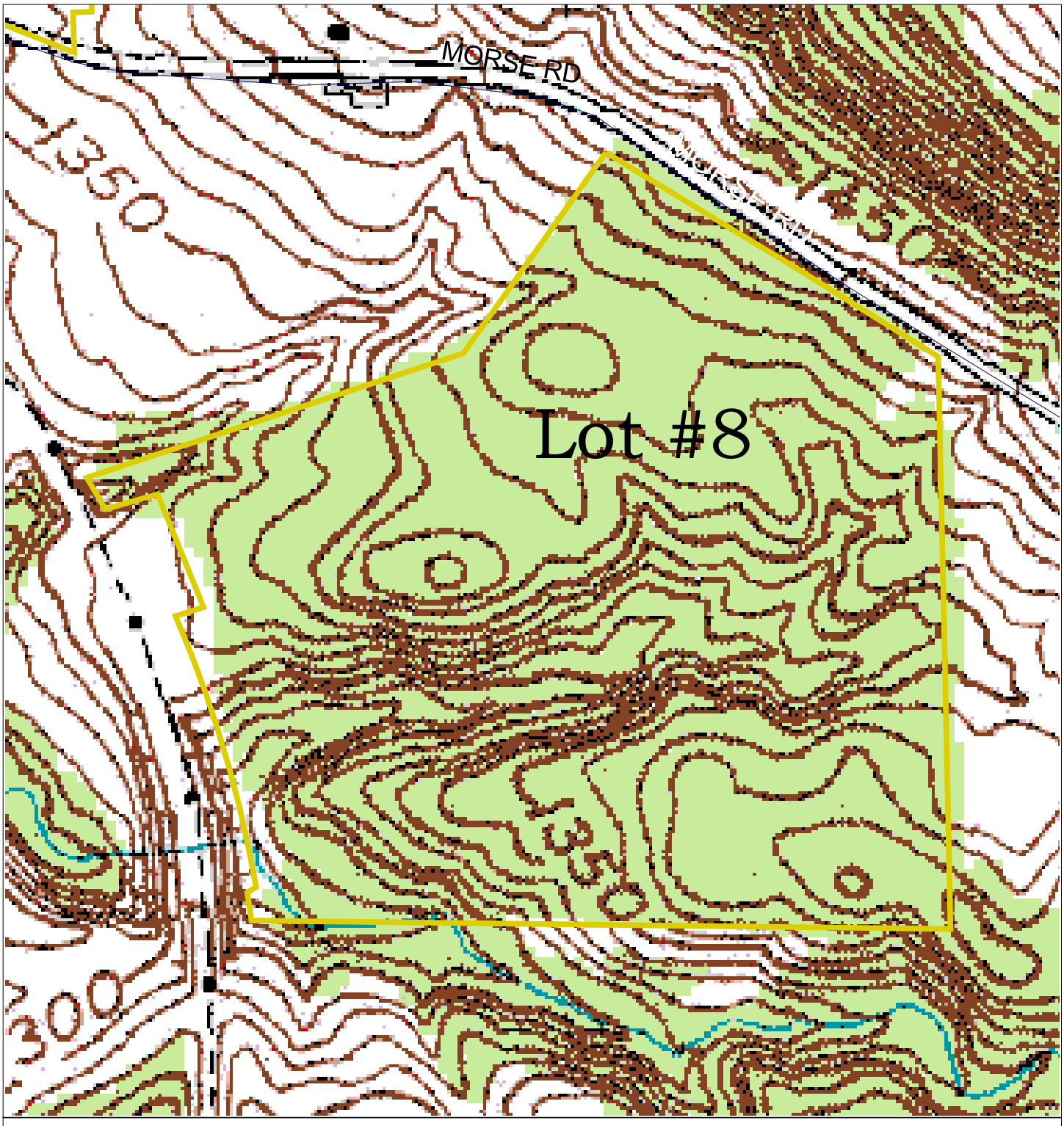
Lot 8
Forest Stewardship Recommendations

Stand A (Old Fields 1, 3) **MEDIUM PRIORITY**

This stand of mature Norway spruce is split by the hardwoods of Stand B. The dominants have enough live crown to support good radial growth, however no intermediate treatment of thinning is recommended to enhance residual crop trees. The scarcity of understory seedlings and saplings necessitates a low thinning to allow more light and heat to stimulate seedling growth before the spruce overstory is removed by patches. Scattered sawlog and pole black cherry should be left for seed with provisions for possible salvage after field checking natural regeneration. Buffers of uncut spruce with no skidder traffic should be left on the steep slopes of the ravine and along the road.

Stand B (Old Field 2) **LOW PRIORITY**

This uneven-aged hardwood stand has low density and many low timber value trees. Potential management for timber production would necessitate timber stand improvement to remove large culls providing release for dense sapling growth. However, since this stand is quite narrow within steep slopes along a Class ‘A’ protected stream, a buffer should be maintained and this would make access difficult. Assign this stand a low priority for timber stand improvement work and reevaluate in 10 years.



Erie County Forest Management Plan

USGS Topographic Quadrangle

Map Prepared By:
Erie County Soil and Water Conservation District

N
W E
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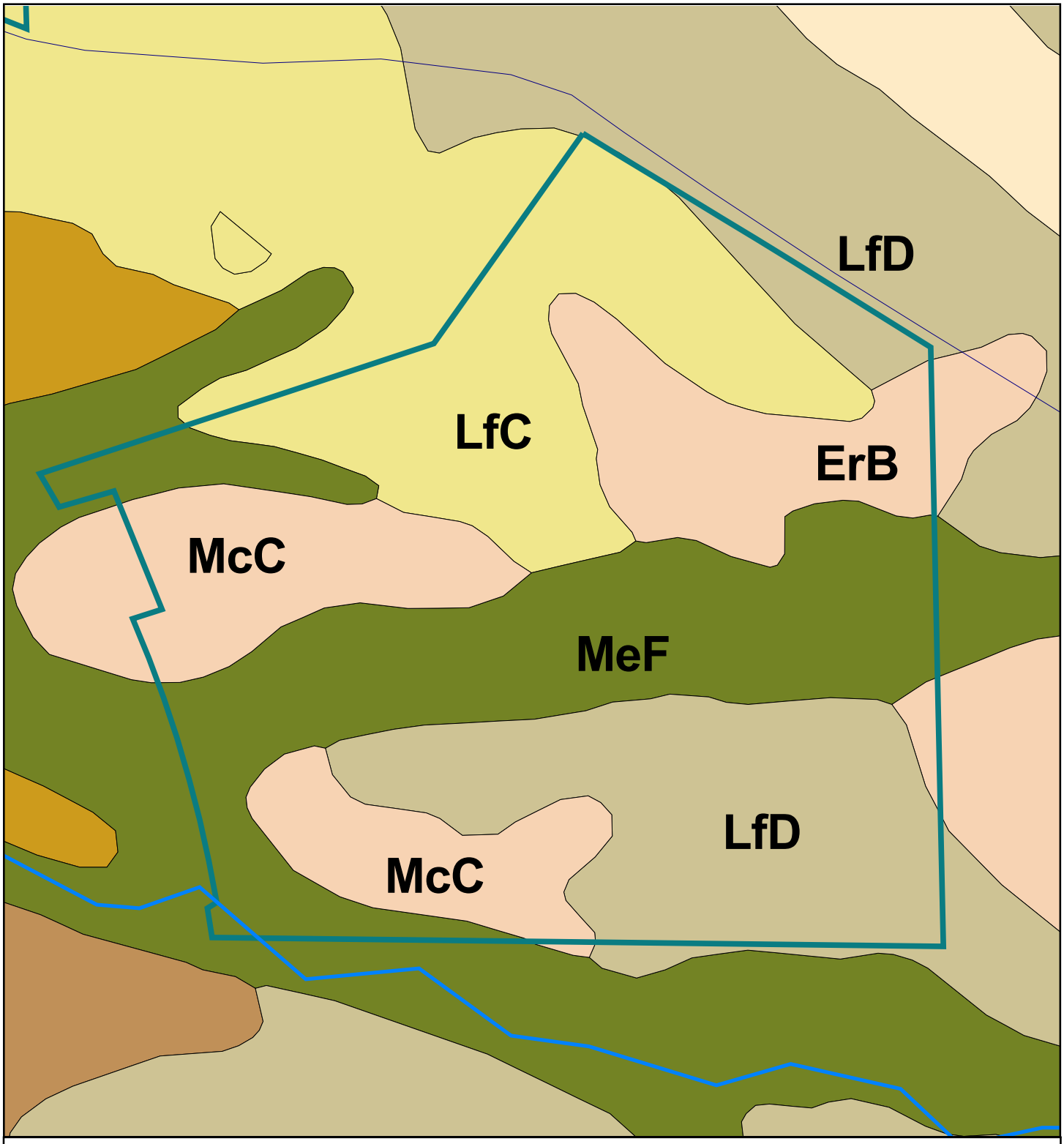
300 0 300 Feet



Erie County Forest Management Plan

Lot #8 - Soil types

Map Prepared By:
Erie County Soil and Water Conservation District

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W
E
S

200 0 200 400 Feet

Erie County Soil and Water Conservation District & USDA Natural Resources Conservation Service

Brief Soil Descriptions – Lot 8

For further information refer to the *Soil Survey of Erie County, New York*.

Symbol **Name / Description**

ErB Erie Channery Silt Loam, 3 to 8 Percent Slopes

Deep, gently sloping, somewhat poorly drained, medium lime, channery silt loam formed in coarse loamy glacial till. It has a very firm fragipan at depth of 14 to 40 inches. The available water capacity is moderate. Permeability is moderate above the fragipan and very slow in the fragipan. POTENTIALLY HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIIw, NYS SOIL GROUP-6b, K=.24, T=3

LfC Langford Channery Silt Loam, 8 to 15 Percent Slopes

Deep, sloping, moderately well drained and well drained, medium lime, channery silt loam soil formed in glacial till deposits derived mainly from limestone and shale. There is a firm, dense fragipan 15 to 20 inches deep which is approximately 24 inches thick. The available water capacity is moderate. Permeability is moderate above the fragipan and slow or very slow below the fragipan. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIIe, NYS SOIL GROUP-6b, K=.20, T=3

LfD Langford Channery Silt Loam, 15 to 25 Percent Slopes

Deep, moderately steep, moderately well drained and well-drained, medium lime, channery silt loam soil formed in glacial till deposits derived mainly from limestone and shale. There is a firm, dense fragipan 15 to 20 inches deep which is approximately 24 inches thick. The available water capacity is moderate. Permeability is moderate above the fragipan and slow or very slow below the fragipan. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IVe, NYS SOIL GROUP-7b, K=.20, T=3

McC Mardin Silt Loam, 8 to 15 Percent Slopes

Deep, sloping, moderately well drained and well drained, low lime, silt loam soil formed in coarse loamy glacial till. It has a very firm fragipan at a depth of 16 to 50 inches. The available water capacity is moderate. Permeability is moderate above the fragipan and slow or very slow in the fragipan and substratum. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIIe, NYS SOIL GROUP-6b, K=.32, T=3

MeF Mardin-Valois Complex, 25 to 50 Percent Slopes

Deep, very steep, well-drained, low lime soil formed in coarse loamy glacial till. The Mardin soil has a very firm fragipan at a depth of 16 to 50 inches. The available water capacity is moderate. Permeability ranges from moderate to slow. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-VIIe, NYS SOIL GROUP-9b, K=.24, T=3

1965 Conservation Plan Map

Lot #8

Erie County
Forest Management Plan

Map Prepared By:
Erie County Soil and Water
Conservation District

* Basemap Source: 1995 Color IR Orthophotography

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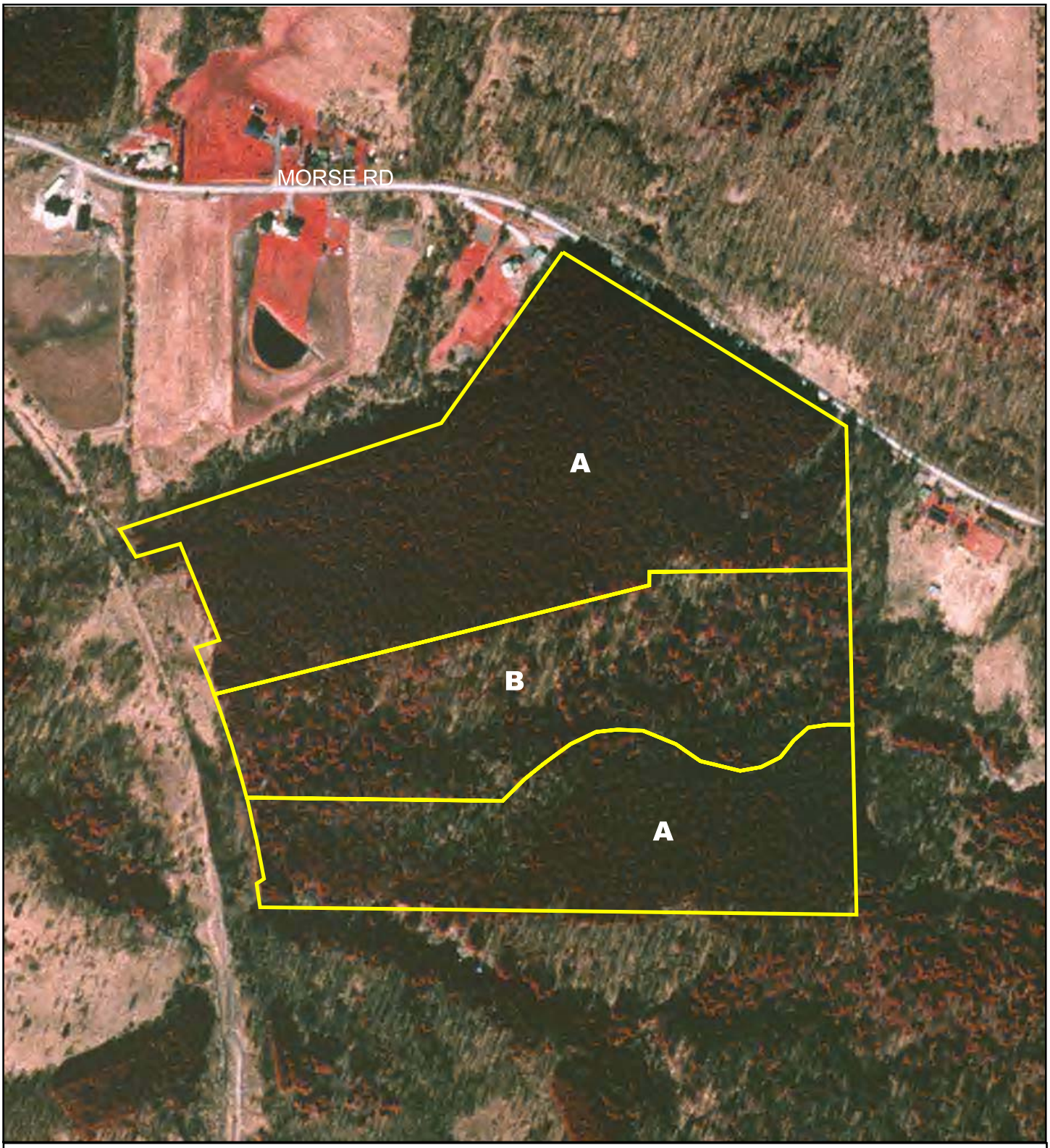
300 0 300 Feet



2003 Stewardship Recommendation Map

Lot #8

Erie County
Forest Management Plan

Map Prepared By:
Erie County Soil and Water
Conservation District

* Basemap Source: 1995 Color IR Orthophotography

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